Abstract

A catadioptric projection objective for projecting a pattern arranged in the object plane of the projection objective into the image plane of the projection objective, having:

a first objective part for projecting an object field lying in the object plane into a first real intermediate image;

- a second objective part for generating a second real 10 intermediate image with the radiation coming from the first objective part;
 - a third objective part for generating a third real intermediate image with the radiation coming from the second objective part; and
- 15 a fourth objective part for projecting the third real intermediate image into the image plane.